

AD-A087 450

ACADEMY OF HEALTH SCIENCES (ARMY) FORT SAM HOUSTON TX--ETC F/6 6/5
NONPRODUCTIVE FACTOR ALLOWANCE. (PILOT STUDY).(U)
MAR 80 D F ALEXANDER, A D MANGELSDORFF

UNCLASSIFIED

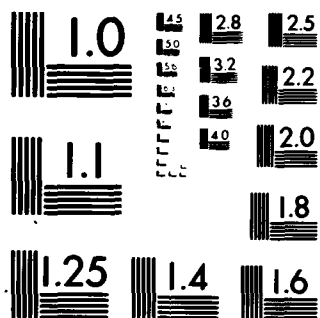
HCSO-80-002

NL

1 of 1
AL



END
DATE
FILMED
8-80
DTIC



MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS-1963-A

LEVEL II

②
B. 5.

HEALTH CARE STUDIES DIVISION REPORT #80-002

NONPRODUCTIVE FACTOR ALLOWANCE
(Pilot Study)

by

David F. Alexander, MS, MA, DAC
A. David Mangelsdorff, PhD, DAC

Health Care Studies Division
Academy of Health Sciences
Fort Sam Houston, TX 78234

31 March 1980

Final Report

Approved for Public Release
Distribution Unlimited

Prepared for

UNITED STATES ARMY HEALTH SERVICES COMMAND
Fort Sam Houston, TX 78234

BDC FILE COPY

DTIC
ELECTE
AUG 5 1980
S D D

80 8 1 049

ADA 087450

NOTICE

The findings in this report are not to be construed as an official Department of the Army position unless so designated by other authorized documents.

Regular users of the services of the Defense Documentation Center (Per DOD Instruction 5200.21) may order directly from the following:

Defense Documentation Center (DDC)
ATTN: DDC-TSR
Cameron Station
Alexandria, VA 22314

Telephones: AUTOVON (108) 28-47633, 34, or 35
IDS 107-47633, 34, or 35
Commercial (202) 27-47633, 34, or 35

All other requests for these reports will be directed to the following:

US Department of Commerce
National Technical Information Services (NTIS)
5285 Port Royal Road
Springfield, VA 22161

Telephone: Commercial (703) 557-4650

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM	
1. REPORT NUMBER Health Care Studies Div Rpt	2. GOVT ACCESSION NO. HCSDA 14 180-002 AD-A087450	3. RECIPIENT'S CATALOG NUMBER	
4. TITLE (and Subtitle) NONPRODUCTIVE FACTOR ALLOWANCE (Pilot Study)	5. TYPE OF REPORT & PERIOD COVERED Final Report 1 Mar 78 - 31 Mar 80	6. PERFORMING ORG. REPORT NUMBER	
7. AUTHOR(s) David F. Alexander, MS, MA, DAC A. David Mangelsdorff, PhD, DAC	8. CONTRACT OR GRANT NUMBER(s)		
9. PERFORMING ORGANIZATION NAME AND ADDRESS Health Care Studies Division (HSA-CHC) Academy of Health Sciences, US Army Fort Sam Houston, Texas 78234	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS		
11. CONTROLLING OFFICE NAME AND ADDRESS Commander, US Army Health Services Command ATTN: HSPA-N Fort Sam Houston, Texas 78234	12. REPORT DATE 31 March 1980	13. NUMBER OF PAGES 86	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) 12,95	15. SECURITY CLASS. (of this report) Unclassified	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
16. DISTRIBUTION STATEMENT (of this Report) Unlimited distribution <div style="border: 1px solid black; padding: 5px; display: inline-block;"> DISTRIBUTION STATEMENT A Approved for public release; Distribution Unlimited </div>			
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)			
18. SUPPLEMENTARY NOTES			
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Active Army; Personnel; Management; Scheduling			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The objectives of this study were: (1) to determine the validity of the present (1.11) nonproductive factor, (2) to identify other allowable categories of non-productive time that should be used in determining the nonproductive factor, and (3) to recommend a new nonproductive factor if the present factor is not valid.			

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

408 688

**NONPRODUCTIVE FACTOR ALLOWANCE
(Pilot Study)**

SUMMARY

The Chief Nurses, US Army Health Services Command and Office of the Surgeon General, Department of the Army (HQDA) are interested in the validity of the 1.11 nonproductive factor used in present staffing guides (AR 570-4, 17 Nov 75 and DA Pam 570-4, 8 Apr 74), especially for the Department of Nursing at the Army Medical Department activities. Two General Accounting Office reports have addressed the staffing criteria problem. One of the GAO reports indicates the Air Force has done more in this area than either the Army or Navy. The purposes of the study were to determine the validity of the present factor, to identify other allowable categories of nonproductive time that should be used in determining the nonproductive factor, and to recommend a new nonproductive factor if the present factor is not valid. Data collection was obtained by a mailed survey used for reporting all lost time in selected Health Services Command medical treatment facilities on four specific dates -- one day in each of four consecutive months. Data was transferred to punch cards by Health Care Systems Support Activity, HSC. Printouts were forwarded to HCSD for analysis. It was concluded that:

- (1) The present 1.11 factor does not appear to be valid for all MTFs;
- (2) A separate factor (or range of factors) according to facility size (MEDCEN, Large MEDDAC, or Small MEDDAC) would offer more appropriate standards;
- (3) Several additional categories of lost time have been identified for consideration in determining a new nonproductive standard;
- (4) A model, similar to the Air Force Standard Workweek and Man-Hour Availability, could be developed using the data from the identified categories of lost time;
- (5) Consideration could be given by the Secretary of Defense to using the models as standards for all Services in compliance with GAO recommendations;
- and (6) No new specific factor or model has been developed. A decision would have to be made to decide if the range, mean, or median value would be used for each allowable category for each facility size.

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DDC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification _____	
By _____	
Distribution/	
Availability Codes	
Dist.	Avail and/or special
A	

ACKNOWLEDGEMENTS

The project officer wishes to express his appreciation to the following individuals, without whose advice and assistance this study could not have been done:

COL Ellen J. Gann, ANC, COL (Ret) Marjorie Wilson, ANC, Mr. Robert Harbin, DAC, Headquarters, US Army Health Services Command; COL Elizabeth I. Rogers, ANC, COL Vera Nolfe, ANC, MAJ Donna Albee, ANC, Mr. Robert Battay, DAC, Headquarters, Brooke Army Medical Center; the commanders, chief nurses, and project officers at the thirty-five HSC medical centers/medical department activities used in this study; COL B.H. Corum, MSC, USAF, Wilford Hall Medical Center (USAF), Lackland AFB; and Mr. Harry Sanson, DAFC, Brooks AFB.

CONTENTS

	PAGE
I INTRODUCTION	1
II OBJECTIVES	1
III METHODOLOGY	1
IV FINDINGS	4
V DISCUSSION	5
VI CONCLUSIONS	7
VII RECOMMENDATIONS	7
VIII LITERATURE CITED	8
IX APPENDICES	55
X DISTRIBUTION LIST	86

LIST OF TABLES

TABLE		PAGE
1	HSC Data Collection Sites	9
2	Nonproductive Factor (By Facility Size)	11
3	Assigned Personnel (By Facility Size)	13
4	Nonproductive Factor (By Sex)	15
5	Assigned Personnel (By Sex)	17
6	Monthly Mean Values, F Ratios, Simple Effects Comparison & Test of Linearity for NPF (Percentage for Each Sex)	19
7	Monthly Mean Values, F Ratios, Simple Effects Comparison & Test of Linearity for Number of Assigned Personnel (For Each Sex)	21
8	Monthly Mean Values, F Ratios, Simple Effects Comparison & Test of Linearity for Lost Time (Nonpregnancy Hours for Each Sex)	23
9	Monthly Mean Values, F Ratios, Simple Effects Comparison & Test of Linearity for Pregnancy (Lost Time Hours for Each Sex)	25
10	Monthly Mean Values, F Ratios, Simple Effects Comparison & Test of Linearity for Total Hours of Lost Time for Each Sex	27
11	Nonpregnancy Related Lost Time (By Facility Size)	29
12	Nonpregnancy Related Lost Time (By Sex)	36
13	Pregnancy Related Lost Time (By Facility Size)	41
14	Pregnancy Related Lost Time (By Sex)	44
15	Regular Scheduled Day Off & Sex Assigned (By Facility Size)	47
16	Regular Scheduled Day Off (By Sex)	49
17	Standard Air Force Workweek & Man-Hour Availability	51
18	Air Force Time Classifications	53

LIST OF APPENDICES

APPENDIX		PAGE
A	HSC Command Letter to Field Announcing Nonproductive Factor Allowance Study	55
B	Report of Nonproductive Time Questionnaire	57
C	Department of Nursing Activities Strength Report	60
D	AHS Letter of Instructions for Data Collection 15 February 1979	63
E	AHS Letter of Instructions for Data Collection 20 July 1979	66
F	AHS Letter of Instructions for Data Collection 29 August 1979	70
G	AHS Letter of Instructions for Data Collection 24 September 1979	74
H	AHS Letter of Instructions for Data Collection 11 October 1979	78
I	Definitions	82

NONPRODUCTIVE FACTOR ALLOWANCE

1. INTRODUCTION.

a. Purpose. The purpose of this study was to determine the validity of the 1.11 factor as a nonproductive time allowance in the staffing guide for nursing personnel used within selected medical treatment facilities (MTF) of the US Army Health Service Command (HSC).

b. Background.

(1) A questionnaire survey conducted for the Nursing Division, Health Services Command in the spring of 1976 questioned the chief nurses' perceptions of the adequacies of current methods of determining nursing personnel requirements. Respondents were concerned that the nonproductive time factor allowed by the staffing guide was too low.

(2) Two General Accounting Office (GAO) reports, "Development and use of Military Services' Staffing Standards," and "Uniform Accounting and Workload Measurement Systems Needed for Department of Defense Medical Facilities," have shown staffing criteria between the military services are a severe problem.

(3) The Army apparently has done little to rectify the system as it pertains to the Army Medical Department. Army definitions of the constitution of the nonproductive factor allowance are vague: a specific amount (time or percent) is not committed to leave, or medical, or training, etc. Apparently, no model exists in the Army for what makes up the nonproductive factor, or nonproductive time.

2. OBJECTIVES.

The objectives of the study were:

a. To determine the validity of the 1.11 factor as a nonproductive time allowance for nursing care staffing within selected MTF of HSC.

b. To identify other allowable categories of nonproductive time that should be used in determining a nonproductive time factor.

c. To recommend a new nonproductive time factor if the present factor is not valid.

3. METHODOLOGY.

a. Overview. Due to budget constraints imposed on this study, the data requirements were obtained using a survey instrument mailed from the test site to HCSD for analysis. A pilot study was conducted using data from Fort Hood, Texas MEDDAC. The research effort that followed used the same survey to collect data one day each of four consecutive months. Data was transferred to punch cards by Health Care Systems Support Activity, HSC. Cards were then run on the CDC 6500 Computer at Fort Leavenworth, Kansas, and the printouts forwarded to HCSD for analysis. Limited telephonic interviews of other military services were done.

b. Procedure.

- (1) A letter from HSC (HSPA-N), subject: Nonproductive Factor Allowance, dated 6 December 1978 (Appendix A), was mailed to selected HSC MEDCEN/MEDDAC commanders (Table 1) indicating a survey questionnaire was being mailed to them by AHS, and stressing HSC command interest in this study.
- (2) A letter from AHS (HSA-CHC), subject: Nonproductive Factor Allowance, dated 12 February 1979 (Appendix D), for data collection on 15 February 1979, with Report of Nonproductive Time Questionnaire (Appendix B), and Department of Nursing Activities Strength Report (Appendix C), was mailed to Commander, MEDDAC, Fort Hood, Texas, for a pilot test of the data collection instruments (Appendices B and C).
- (3) A letter from AHS (HSA-CHC), subject: Nonproductive Factor Allowance, dated 14 June 1979 (Appendix E), with data collection instructions and instruments (Appendices B and C), for 20 July 1979, was mailed to each test site (Table 1).
- (4) A letter from AHS (HSA-CHC), subject: Nonproductive Factor Allowance, dated 23 July 1979 (Appendix F), with data collection instructions and instruments (Appendices B and C), for 29 August 1979, was mailed to each test site (Table 1).
- (5) A letter from AHS (HSA-CHC), subject: Nonproductive Factor Allowance, dated 28 August 1979 (Appendix G), with data collection instructions and instruments (Appendices B and C), for 24 September 1979, was mailed to each test site (Table 1).
- (6) A letter from AHS (HSA-CHC), subject: Nonproductive Factor Allowance, dated 20 September 1979 (Appendix H), with data collection instructions and instruments (Appendices B and C), for 11 October 1979, was mailed to each test site (Table 1).
- (7) Each data collection instrument was a survey questionnaire using data for the specific collection date, e.g., 20 July 1979, 29 August 1979, etc. Each questionnaire, upon completion, was to be returned to the HCSD project officer.
- (8) Computer processing of the data was accomplished by HCSD.

c. Data Analysis. For the purpose of data consolidation and computer listings the CDC 6500 computer at Fort Leavenworth, Kansas, was used to run programs from the Statistical Package of the Social Sciences. Key punching support was provided by the Health Care Systems Support Element (HCSSE), HSC, for the cards that were necessary. Programings were performed by individuals within the study agency.

(1) Descriptive analysis of reported data was compiled from the questionnaires. Descriptive statistics included mean, median, and range for each dependent variable broken down by facility size [(1) MEDCEN, (2) Large MEDDAC, and (3) Small MEDDAC] and by sex [(1) Male and (2) Female].

(2) Definitions of terms used for computations:

- (a) Post 1 - 8 = MEDCEN (Cards 1 and 2)
- (b) Post 9 - 22 = Large MEDDAC (Cards 1 and 2)
- (c) Post 23 - 35 = Small MEDDAC (Cards 1 and 2)

(d) Total Personnel Assigned = Total Enlisted Personnel Male +
 Total Enlisted Personnel Female +
 Total Officer Personnel Male +
 Total Officer Personnel Female +
 Total Civilian RN Male +
 Total Civilian RN Female +
 Total Civilian Other Than RN Male +
 Total Civilian Other Than RN Female
 (From Card 2)

(e) Males Assigned = Total Enlisted Personnel Male +
 Total Officer Personnel Male +
 Total Civilian RN Male +
 Total Civilian Other Than RN Male
 (From Card 2)

(f) Females Assigned = Total Enlisted Personnel Female +
 Total Officer Personnel Female +
 Total Civilian RN Female +
 Total Civilian Other Than RN Female
 (From Card 2)

(g) Percent Males Assigned = $\frac{\text{Males Assigned (From Card 2)}}{\text{Total Personnel Assigned (From Card 2)}}$

(h) Percent Females Assigned = $\frac{\text{Females Assigned (From Card 2)}}{\text{Total Personnel Assigned (From Card 2)}}$

(i) Total Available Time = (Total Personnel Assigned [From Card 2]
 - Personnel On Scheduled Day Off [From Card
 1]) x 8 Hours

(j) Percent Personnel on Scheduled Day Off = $\frac{\text{Personnel On Scheduled Day Off (From Card 1)}}{\text{Total Personnel Assigned (From Card 2)}}$

(k) Lost Time (Nonpregnancy) = Total of all hours reported in Question
 9 (Card 1)

(l) Lost Time (Pregnancy) = Total of all hours reported in Question 12
 (Card 1)

(m) Total Lost Time = Total of all hours reported in Questions 9 and 12
 (Card 1)

(n) Nonproductive Factor = $\frac{\text{Total Lost Time (From Card 1)}}{\text{Total Available Time (See i above)}}$

(3) Analysis of variance (ANOVA) was performed on each of the dependent variables. ANOVAs were calculated between months. Significant F values were examined for differences between means using the Duncan's Multiple Range Procedure ($p < .05$). Tests for linearity were also examined.

4. FINDINGS.

a. There were 45,029 total personnel assigned to the thirty-five MTFs on the four data collection dates.

b. There were 14,794 (32.8%) personnel who reported lost time, or regular scheduled day off, on the four data collection dates.

c. The present 1.11 factor (11% nonproductive time) does not appear to be valid for all MTFs.

d. The nonproductive factor for the eight MEDCEN ranged from 1.4% to 57.6%, as shown in Table 2.

e. The nonproductive factor for the fourteen large MEDDAC ranged from 7.0% to 34.6%, as shown in Table 2.

f. The nonproductive factor for the thirteen small MEDDAC ranged from 1.5% to 46.5%, as shown in Table 2.

g. Nonproductive factors by sex are shown in Table 4.

h. Data for personnel assigned by facility size (MEDCEN, large MEDDAC, or small MEDDAC) are shown in Table 3.

i. Data for personnel assigned by sex are shown in Table 5.

j. ANOVAs between the months were calculated for each of the dependent variables. There were significant differences between months on three variables: nonproductive factor, nonpregnancy lost time, and total lost time. The month of July was significantly different than the other months on all three analyses. Both July and August were significantly different from the months of September and October on the nonproductive factor and the nonpregnancy lost time. The tests of linearity indicated that the curves leveled off in September and in October recordings. Tables 6 thru 10 depict the findings.

k. Data for each type of nonpregnancy related lost time by facility size are shown in Table 11.

l. Data for each type of nonpregnancy related lost time by sex are shown in Table 12.

m. Data for each type of pregnancy related lost time by facility size are shown in Table 13.

n. Data for each type of pregnancy related lost time by sex are shown in Table 14.

o. Data for regular scheduled day off by facility size are shown in Table 15.

p. Data showing the total number of personnel assigned for the four months by facility size and sex are shown in Table 15.

q. Data for regular scheduled day off by sex are shown in Table 16.

5. DISCUSSION.

a. The finding that the nonproductive factor ranged from 1.4% to 57.6% depending on sex and facility size, indicated the present 1.11 factor (11%) is not valid for all MTFs. The higher mean and median for each facility size and sex also indicated the present factor is not valid, reference Tables 2 and 3.

b. One study in the civilian sector (Cercione, 1978) reported the staff spent an average of 15% in nonproductive activities on days and 15.4% on evenings. The standard set for that hospital was 11.8%.

c. The finding that a range of 33 to 891 personnel of one sex are assigned to MTF indicate each facility has a wide range of total personnel assigned and a wide range of sex mix.

d. The Air Force standards allow a specific number of hours for each type of nonavailable time. The Army description of what constitutes nonproductive time is very vague, with no definitions nor specific hours given for the make-up of nonproductive time. This study has identified several areas that should be considered. Data concerning these areas are in Tables 6 thru 9. Many of these areas parallel the Air Force nonavailable time in Table 12.

e. The data shown in Tables 1 thru 10 are arranged according to size of MTF as used in Comptroller reports. It appears consideration should be given to this arrangement for the nonproductive factor -- a separate factor for each size of facility, i.e., MEDCEN, Large MEDDAC, and Small MEDDAC.

f. In a GAO audit report, "Development and Use of Military Services' Staffing Standards," October 1977, personnel costs are indicated to be significant in the Department of Defense budget by the outlay accounting for approximately 56% of DOD's total fiscal year 1977 budget. The process of determining personnel requirements should be clearly understood by decision makers. This GAO report indicated the Air Force placed the most importance on developing and using staffing standards based on work measurement in determining and justifying staffing requirements.

g. Another GAO audit report, "Uniform Accounting and Workload Measurement Systems Needed for Department of Defense Medical Facilities," January 1978, indicated in the absence of uniform DOD staffing criteria, each military service has its own way of determining hospital staffing needs. This report showed the Army determines medical and dental staffing requirements for its hospitals by a manpower utilization survey in which a team from US Army Health Service Command visits each facility and reviews staffing and workload data supporting the staffing recommendations of the hospital commander. Staffing requirements are established for each organizational element of the hospital, based on workload and productivity. After the survey team completes its review, it indicates what the team considers to be the staffing necessary for the hospital to accomplish its mission. A

recommendation of the report was that the Secretary of Defense develop and issue uniform staffing criteria for military health care facilities.

h. DA Pam 570-557, DA Pam 570-4, and AR 570-4, indicate a staffing guide for determining the number and kind of positions required to operate US Army Medical Department Activities of varying size and workload.

(1) The yardsticks contained in the staffing guide are designed for functions primarily at US Army fixed medical treatment facilities in the Continental United States.

(2) The qualitative staffing information contained in the staffing guide is designed primarily to aid in properly classifying and identifying military and civilian positions in medical department activities tables of distribution and allowances.

(3) The yardsticks provide for 40-hour a week operations and include normal allowances for nonproductive time such as annual and sick leave, training and orientation time, and military duties such as KP, guard, and courts and boards.

(4) The yardsticks are designed for normal performance of each function under ordinary operating situations.

1. The Air Force is much more specific in determining staffing requirements. They staff a complete "work center," i.e., pediatric ward, surgery clinic, which includes the required doctors, nurses, technicians, and clerks.

j. Air Force Regulation 25-5, Volume I, as changed, gives definitions as they apply to management engineering. An extract of definitions applicable to manpower planning and staffing is at Appendix I. An important point is that the Air Force recognizes many more areas of nonproductive time than the present Army guide, such as retreats and parades, CQ, PT, human relations training, voting, jury duty, and AWOL.

k. Air Force Manual 26-1, as changed, recognizes 168 monthly assigned hours. Computations of the Air Force standards and the nonavailable hours are in Table 12. The Air Force 24 nonavailable hours compute to a 14.3% nonproductive factor.

1. Time classifications used by the Air Force, extracted from Air Force Regulation 25-5, Volume II, as changed, are in Table 13. It will be noted the Air Force nonavailable time equates to the Army nonproductive time. Categories of the Air Force nonproductive time apparently are not considered by the Army.

m. The monthly man-hour availability factors (MAFs) for active duty Air Force military and civilians are based on average assigned and available man-hours. Availability for primary duty during a given workweek depends upon the amount of assigned time which is required for activities such as leave, medical absences, and training. Standard Air Force workweeks, average workdays/month, and man-hour availability factors used for allocating manpower is shown in Table 12. Nonavailable time is generated by personnel when they participate in activities directed, recognized, or approved by the Air Force that render them unavailable for assigned primary duties.

6. CONCLUSIONS.

- a. The present 1.11 factor does not appear to be valid for all MTFs.
- b. Several additional categories of lost time have been identified.
- c. No new specific factor has been developed. The findings of the study suggest that the generation of a single valid nonproductive factor applicable to all facilities at all times cannot be identified because of the large variance within and among the MTFs over time.

7. RECOMMENDATIONS.

- a. That this study be considered as a pilot study.
- b. Given the findings of this pilot study, additional study efforts are unwarranted.
- c. Current staffing guides with knowledgeable use of local appraisal continue to be the basis for manpower allocations.

LITERATURE CITED

1. The Comptroller General of the United States, "Report to the Congress: Uniform Accounting and Workload Measurement Systems Needed for Department of Defense Medical Facilities," January 17, 1978, p. 9.
2. The Comptroller General of the United States, "Report to the Congress: Development and Use of Military Services' Staffing Standards," October 1977, p. 1.
3. Headquarters, Department of the Army, Army Regulations 570-4, "Manpower Management," November 1975, with changes, p. 3-1.
4. Headquarters, Department of the Army, Pamphlet 570-4, "Manpower Procedures Handbook," April 1974, p. 2-4, 2-5, and 4-1.
5. Headquarters, Department of the Army, Pamphlet 570-557, "Staffing Guide for US Army Medical Department Activities," June 1974, p. 1-1 and 1-3.
6. Headquarters, Department of the Air Force, Air Force Regulations 25-5, Volume I, "Air Force Management Engineering Program (MEP)," November 1977, with changes, p. A2-1 to A2-10.
7. Headquarters, Department of the Air Force, Air Force Regulations 25-5, Volume II, "Air Force Management Engineering Program (MEP)," November 1977, with changes, p. 4-1 to 4-7 and A8-1 to A8-5.
8. Headquarters, Department of the Air Force, Air Force Manual 26-1, "Manpower Policies and Procedures," May 1973, with changes, p. 2-1 to 2-8.
9. Cercone, Romeo. "Measuring Activity by 'work sampling'." Dimensions in Health Service 55(11) (November 1978): 34.

TABLE 1

HSC DATA COLLECTION SITES

HSC DATA COLLECTION SITES

MEDCEN

Tripler Army Medical Center
Brooke Army Medical Center
Fitzsimons Army Medical Center
Eisenhower Army Medical Center

Letterman Army Medical Center
Madigan Army Medical Center
Walter Reed Army Medical Center
William Beaumont Army Medical Center

LARGE MEDDAC

Fort Belvoir MEDDAC
Fort Benning MEDDAC
Fort Bragg MEDDAC
Fort Campbell MEDDAC
Fort Carson MEDDAC
Fort Dix MEDDAC
Fort Hood MEDDAC

Fort Jackson MEDDAC
Fort Knox MEDDAC
Fort Leonard Wood MEDDAC
Fort Ord MEDDAC
Fort Polk MEDDAC
Fort Riley MEDDAC
Fort Sill MEDDAC

SMALL MEDDAC

Fort Devens MEDDAC
Fort Eustis MEDDAC
Fort Huachuca MEDDAC
Fort Leavenworth MEDDAC
Fort Lee MEDDAC
Fort McClellan MEDDAC

Fort Monmouth MEDDAC
Fort Meade MEDDAC
Fort Rucker MEDDAC
Fort Stewart MEDDAC
Fort Wainwright MEDDAC
West Point MEDDAC

Redstone Arsenal MEDDAC

Table 1

TABLE 2

**NONPRODUCTIVE FACTORS
(By Facility Size)**

CATEGORY

Nonproductive Factor

TABLE 3

**ASSIGNED PERSONNEL
(By Facility Size)**

ASSIGNED PERSONNEL

CATEGORY

	<u>MEDCEN</u>			<u>LARGE MEDDAC</u>			<u>SMALL MEDDAC</u>		
	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>
Assigned									
Overall (Personnel)	217-891	336	303	85-241	150	144	33-89	63	63
October 1979	239-728	336	303	90-241	149	141	37-85	64	66
September 1979	240-726	338	287	89-240	150	140	37-86	64	63
August 1979	222-632	334	296	85-237	151	143	33-88	61	58
July 1979	217-891	336	283	102-226	150	146	43-89	64	65

Table 3

TABLE 4

**NONPRODUCTIVE FACTORS
(By Sex)**

NONPRODUCTIVE FACTORS

SEX

	<u>MALE</u>		<u>FEMALE</u>	
	<u>Range</u>	<u>Mean</u>	<u>Range</u>	<u>Mean</u>
Nonproductive Factor				
Overall (Percent)	2.4-57.6	18.3	1.4-46.5	19.2
October 1979	2.4-32.1	17.0	1.4-32.5	16.8
September 1979	4.4-29.6	15.2	1.5-28.6	16.5
August 1979	9.5-33.6	19.0	8.8-46.5	21.0
July 1979	6.3-57.6	22.2	7.1-41.3	22.4

Table 4

TABLE 5

**ASSIGNED PERSONNEL
(By Sex)**

ASSIGNED PERSONNEL

SEX

	<u>MALE</u>		<u>FEMALE</u>	
	<u>Range</u>	<u>Mean</u>	<u>Range</u>	<u>Mean</u>
Assigned				
Overall (Personnel)	39-469	141	33-891	180
October 1979	39-390	139	37-728	181
September 1979	44-469	144	37-726	178
August 1979	42-416	142	33-632	177
July 1979	43-334	138	43-891	184

Table 5

TABLE 6

MONTHLY MEAN VALUES, F RATIOS, SIMPLE EFFECTS COMPARISON
AND TEST OF LINEARITY
FOR NONPRODUCTIVE FACTOR (PERCENTAGE FOR EACH SEX)

MONTHLY MEAN VALUES, F RATIOS, SIMPLE EFFECTS COMPARISON AND TEST OF LINEARITY
FOR NONPRODUCTIVE FACTOR (PERCENTAGE FOR EACH SEX)

July	Mean Values		F*	p	Simple Effects Using the Duncan Multiple Range Procedure (p < .05)
	August	September			
22.33	20.04	15.88	10.94	p < .001	July, August > September, October

Test of linearity

F = 3.36 p = .04 r = -.29 R² = .084

* df = 3/276

Table 6

TABLE 7

**MONTHLY MEAN VALUES, F RATIOS, SIMPLE EFFECTS COMPARISON
AND TEST OF LINEARITY
FOR NUMBER OF ASSIGNED PERSONNEL (FOR EACH SEX)**

MONTHLY MEAN VALUES, F RATIOS, SIMPLE EFFECTS COMPARISON AND TEST OF LINEARITY
FOR NUMBER OF ASSIGNED PERSONNEL (FOR EACH SEX)

July	Mean Values		F*	p	Simple Effects Using the Duncan Multiple Range Procedure (p < .05)
	August	September			
161.31	159.68	161.67	0.00	p = ns	ns

Test of linearity

F = 0.00 p = ns r = -.00 R² = .000

* df = 3/276

Table 7

TABLE 8

**MONTHLY MEAN VALUES, F RATIOS, SIMPLE EFFECTS COMPARISON
AND TEST OF LINEARITY
FOR LOST TIME (NONPREGNANCY HOURS FOR EACH SEX)**

MONTHLY MEAN VALUES, F RATIOS, SIMPLE EFFECTS COMPARISON AND TEST OF LINEARITY
FOR LOST TIME (NONPREGNANCY HOURS FOR EACH SEX)

Mean Values			Simple Effects Using the Duncan Multiple Range Procedures ($p < .05$)	
July	August	September	October	
231.35	197.28	150.48	166.22	F* p
				5.04 $p < .002$
				July, August > September, October

Test of linearity

F = 1.78 p = ns r = -.19 R² = .039

* df = 3/276

Table 8

TABLE 9

**MONTHLY MEAN VALUES, F RATIOS, SIMPLE EFFECTS COMPARISON
AND TEST OF LINEARITY
FOR PREGNANCY (LOST TIME HOURS FOR EACH SEX)**

MONTHLY MEAN VALUES, F RATIOS, SIMPLE EFFECTS COMPARISON AND TEST OF LINEARITY
FOR PREGNANCY (LOST TIME HOURS FOR EACH SEX)

July	Mean Values		F*	p	Simple Effects Using the Duncan Multiple Range Procedures (p < .05)
	August	September			
7.21	5.90	6.27	1.04	p = ns	ns

Test of linearity

F = 0.33 p = ns r = -.09 R² = .008

* df = 3/276

Table 9

TABLE 10

**MONTHLY MEAN VALUES, F RATIOS, SIMPLE EFFECTS COMPARISON
AND TEST OF LINEARITY
FOR TOTAL HOURS OF LOST TIME FOR EACH SEX**

MONTHLY MEAN VALUES, F RATIOS, SIMPLE EFFECTS COMPARISON AND TEST OF LINEARITY
FOR TOTAL HOURS OF LOST TIME FOR EACH SEX

July	Mean Values		F*	p	Simple Effects Using the Duncan Multiple Range Procedure (p < .05)
	August	September			
238.57	203.18	156.75	4.81	p < .003	July > September, October

Test of linearity

F = 1.52 p = ns r = -.19 R² = .039

* df = 3/276

Table 10

TABLE 11

**NONPREGNANCY RELATED LOST TIME
(By Facility Size)**

NONPREGNANCY RELATED LOST TIME

CATEGORY

	<u>MEDCEN</u>			<u>LARGE MEDDAC</u>			<u>SMALL MEDDAC</u>		
	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>
Doctor/Dental App't.									
Overall (Hours)	0-8	0.	0	0-8	0.	0	0-8	0.	0
October 1979	0-3	0.	0	0-8	0.	0	0-4	0.	0
September 1979	0-4	0.	0	0-8	0.	0	0-8	0.1	0
August 1979	0-4	0.	0	0-4	0.	0	0-4	0.1	0
July 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
Hospitalization									
Overall (Hours)	0-8	0.5	0	0-8	0.4	0	0-8	0.4	0
October 1979	0-8	0.5	0	0-8	0.4	0	0-8	0.3	0
September 1979	0-8	0.5	0	0-8	0.4	0	0-8	0.4	0
August 1979	0-8	0.5	0	0-8	0.4	0	0-8	0.3	0
July 1979	0-8	0.5	0	0-8	0.4	0	0-8	0.4	0
Convalescent Leave									
Overall (Hours)	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
October 1979	0-8	0.	0	0-8	0.1	0	0-8	0.1	0.1
September 1979	0-8	0.	0	0-8	0.	0	0-8	0.1	0.1
August 1979	0-8	0.1	0	0-8	0.	0	0-8	0.1	0
July 1979	0-8	0.7	0	0-8	0.1	0	0-8	0.	0
Mandatory Training									
Overall (Hours)	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
October 1979	0-8	0.1	0	0-8	0.1	0	0-2	0.1	0
September 1979	0-8	0.1	0	0-2	0.	0	0-8	0.2	0
August 1979	0-8	0.	0	0-8	0.1	0	0-8	0.1	0
July 1979	0-8	0.1	0	0-8	0.	0	0-8	0.1	0

	MEDCEN			LARGE MEDDAC			SMALL MEDDAC		
	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>
Administrative Leave									
Overall (Hours)	0-8	0.	0	0-8	0.	0	0-8	0.	0
October 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
September 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
August 1979	0-8	0.	0	0-8	0.	0	0-8	0.1	0
July 1979	0-8	0.1	0	0-8	0.	0	0-8	0.1	0
AWOL									
Overall (Hours)	0-8	0.	0	0-8	0.	0	0-8	0.	0
October 1979	0-8	0.	0	0-8	0.	0	0-0	0.	0
September 1979	0-1	0.	0	0-8	0.	0	0-1	0.	0
August 1979	0-8	0.	0	0-0	0.	0	0-8	0.	0
July 1979	0-8	0.	0	0-8	0.	0	0-3	0.	0
LWOP									
Overall (Hours)	0-8	0.	0	0-8	0.	0	0-8	0.	0
October 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
September 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
August 1979	0-8	0.	0	0-3	0.	0	0-8	0.	0
July 1979	0-0	0.	0	0-8	0.	0	0-0	0.	0
Holiday Time									
Overall (Hours)	0-8	0.2	0	0-8	0.2	0.1	0-8	0.2	0
October 1979	0-8	0.5	0.3	0-8	0.6	0.3	0-8	0.6	0
September 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0.1
August 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
July 1979	0-8	0.2	0	0-8	0.1	0.1	0-8	0.1	0.1

Table 11 (continued)

	<u>MEDCEN</u>			<u>LARGE MEDDAC</u>			<u>SMALL MEDDAC</u>		
	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>
Continuing Educ.									
Overall (Hours)	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
October 1979	0-8	0.1	0	0-8	0.1	0	0-2	0.	0
September 1979	0-8	0.1	0	0-8	0.2	0	0-8	0.1	0
August 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0.1
July 1979	0-8	0.1	0	0-8	0.	0	0-8	0.1	0
Duty Roster									
Overall (Hours)	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0
October 1979	0-8	0.1	0	0-8	0.2	0	0-8	0.2	0.1
September 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0
August 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0
July 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0
Company Duty									
Overall (Hours)	0-8	0.	0	0-8	0.	0	0-8	0.	0
October 1979	0-8	0.	0	0-8	0.1	0	0-8	0.1	0
September 1979	0-8	0.	0	0-8	0.1	0	0-8	0.	0
August 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
July 1979	0-8	0.1	0	0-8	0.1	0	0-1	0.	0
Compensatory Time									
Overall (Hours)	0-8	0.2	0	0-8	0.3	0	0-8	0.3	0
October 1979	0-8	0.1	0	0-8	0.3	0	0-8	0.2	0
September 1979	0-8	0.1	0	0-8	0.3	0	0-8	0.1	0
August 1979	0-8	0.2	0	0-8	0.2	0	0-8	0.3	0
July 1979	0-8	0.2	0	0-8	0.4	0	0-8	0.4	0
TDY									
Overall (Hours)	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0
October 1979	0-8	0.1	0	0-8	0.2	0.1	0-8	0.2	0
September 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0.1
August 1979	0-8	0.2	0	0-8	0.3	0.1	0-8	0.3	0.2
July 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0.1

Table 11 (continued)

	<u>MEDCEN</u>			<u>LARGE MEDDAC</u>			<u>SMALL MEDDAC</u>		
	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>
Training Holiday									
Overall (Hours)	0-8	0.	0	0-8	0.	0	0-8	0.	0
October 1979	0-8	0.	0	0-1	0.	0	0-0	0.	0
September 1979	0-0	0.	0	0-8	0.	0	0-8	0.	0
August 1979	0-0	0.	0	0-8	0.	0	0-0	0.	0
July 1979	0-8	0.	0	0-8	0.	0	0-4	0.	0
Air Evac/Amb Runs									
Overall (Hours)	0-8	0.	0	0-8	0.	0	0-8	0.1	0
October 1979	0-8	0.	0	0-4	0.	0	0-5	0.1	0
September 1979	0-5	0.	0	0-6	0.	0	0-4	0.1	0
August 1979	0-2	0.	0	0-5	0.	0	0-7	0.1	0
July 1979	0-8	0.1	0	0-8	0.	0	0-8	0.1	0
Staff & Adm Meeting									
Overall (Hours)	0-8	0.1	0	0-8	0.1	0	0-7	0.1	0
October 1979	0-8	0.1	0	0-4	0.1	0	0-6	0.2	0
September 1979	0-7	0.	0	0-5	0.1	0	0-5	0.1	0
August 1979	0-8	0.1	0	0-8	0.1	0	0-3	0.1	0
July 1979	0-8	0.1	0	0-8	0.1	0	0-7	0.1	0
Educ Advancement									
Overall (Hours)	0-8	0.	0	0-8	0.	0	0-8	0.	0
October 1979	0-8	0.	0	0-8	0.	0	0-0	0.	0
September 1979	0-8	0.	0	0-8	0.	0	0-4	0.	0
August 1979	0-8	0.	0	0-8	0.	0	0-2	0.	0
July 1979	0-8	0.	0	0-4	0.	0	0-8	0.	0
Dependant Child									
Overall (Hours)	0-8	0.	0	0-2	0.	0	0-1	0.	0
October 1979	0-3	0.	0	0-1	0.	0	0-0	0.	0
September 1979	0-8	0.	0	0-0	0.	0	0-0	0.	0
August 1979	0-0	0.	0	0-2	0.	0	0-1	0.	0
July 1979	0-8	0.	0	0-1	0.	0	0-0	0.	0

Table 11 (continued)

	<u>MEDCEN</u>			<u>LARGE MEDDAC</u>			<u>SMALL MEDDAC</u>		
	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>
Dependant Illness									
Overall (Hours)	0-8	0.	0	0-8	0.	0	0-8	0.	0
October 1979	0-8	0.	0	0-2	0.	0	0-0	0.	0
September 1979	0-8	0.	0	0-4	0.	0	0-8	0.	0
August 1979	0-8	0.	0	0-8	0.	0	0-2	0.	0
July 1979	0-8	0.	0	0-8	0.	0	0-5	0.	0
Miscellaneous									
Overall (Hours)	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0
October 1979	0-8	0.2	0	0-8	0.2	0	0-8	0.1	0
September 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0
August 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0
July 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0
Orientation									
Overall (Hours)	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0
October 1979	0-8	0.	0	0-8	0.2	0	0-8	0.3	0
September 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
August 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
July 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
Inprocessing									
Overall (Hours)	0-8	0.	0	0-8	0.1	0	0-8	0.	0
October 1979	0-8	0.	0	0-0	0.	0	0-8	0.	0
September 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
August 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.	0
July 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
Outprocessing									
Overall (Hours)	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
October 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
September 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
August 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
July 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.2	0

Table 11 (continued)

	<u>MEDCEN</u>			<u>LARGE MEDDAC</u>			<u>SMALL MEDDAC</u>		
	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>
Emergency Leave									
Overall (Hours)	0-8	0.1	0	0-8	0.	0	0-8	0.	0
October 1979	0-8	0.1	0	0-8	0.	0	0-8	0.1	0
September 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
August 1979	0-8	0.1	0	0-8	0.	0	0-8	0.	0
July 1979	0-8	0.1	0	0-8	0.	0	0-8	0.	0
Terminal Leave									
Overall (Hours)	0-8	0.	0	0-8	0.	0	0-8	0.	0
October 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
September 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
August 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
July 1979	0-8	0.	0	0-8	0.	0	0-8	0.	0
Regular Leave									
Overall (Hours)	0-8	1.5	0.1	0-8	1.4	0.1	0-8	1.3	0.1
October 1979	0-8	1.0	0.5	0-8	1.4	0.1	0-8	1.0	0.5
September 1979	0-8	1.2	0.1	0-8	1.1	0.1	0-8	1.0	0.1
August 1979	0-8	1.8	0.1	0-8	1.4	0.1	0-8	1.5	0.1
July 1979	0-8	1.8	0.1	0-8	1.6	0.1	0-8	1.7	0.1

Table 11 (continued)

TABLE 12

**NONPREGNANCY RELATED LOST TIME
(by Sex)**

NONPREGNANCY RELATED LOST TIME

SEX

	<u>MALE</u>		<u>FEMALE</u>	
	<u>Range</u>	<u>Mean</u>	<u>Range</u>	<u>Mean</u>
Doctor/Dental App't.				
Overall (Hours)	0-8	0.	0-8	0.
October 1979	0-8	0.	0-4	0.
September 1979	0-8	0.1	0-8	0.
August 1979	0-4	0.	0-4	0.
July 1979	0-8	0.1	0-8	0.1
Hospitalization				
Overall (Hours)	0-8	0.3	0-8	0.5
October 1979	0-8	0.2	0-8	0.6
September 1979	0-8	0.3	0-8	0.5
August 1979	0-8	0.2	0-8	0.5
July 1979	0-8	0.3	0-8	0.5
Convalescent Leave				
Overall (Hours)	0-8	0.	0-8	0.1
October 1979	0-8	0.	0-8	0.1
September 1979	0-8	0.	0-8	0.1
August 1979	0-8	0.1	0-8	0.
July 1979	0-8	0.	0-8	0.1
Mandatory Training				
Overall (Hours)	0-8	0.1	0-8	0.1
October 1979	0-8	0.1	0-8	0.1
September 1979	0-8	0.1	0-8	0.1
August 1979	0-8	0.1	0-8	0.1
July 1979	0-8	0.1	0-8	0.
Continuing Educ.				
Overall (Hours)	0-8	0.1	0-8	0.1
October 1979	0-8	0.1	0-8	0.1
September 1979	0-8	0.1	0-8	0.1
August 1979	0-8	0.1	0-8	0.1
July 1979	0-8	0.1	0-8	0.1
Duty Roster				
Overall (Hours)	0-8	0.2	0-8	0.1
October 1979	0-8	0.2	0-8	0.1
September 1979	0-8	0.2	0-8	0.1
August 1979	0-8	0.2	0-8	0.
July 1979	0-8	0.2	0-8	0.

Table 12

		<u>MALE</u>		<u>FEMALE</u>	
		<u>Range</u>	<u>Mean</u>	<u>Range</u>	<u>Mean</u>
Company Duty					
Overall (Hours)		0-8	0.1	0-8	0.
October 1979		0-8	0.1	0-8	0.
September 1979		0-8	0.1	0-2	0.
August 1979		0-8	0.1	0-8	0.
July 1979		0-8	0.1	0-8	0.
Compensatory Time					
Overall (Hours)		0-8	0.3	0-8	0.2
October 1979		0-8	0.3	0-8	0.1
September 1979		0-8	0.3	0-8	0.1
August 1979		0-8	0.3	0-8	0.2
July 1979		0-8	0.4	0-8	0.3
TDY					
Overall (Hours)		0-8	0.2	0-8	0.1
October 1979		0-8	0.2	0-8	0.1
September 1979		0-8	0.2	0-8	0.1
August 1979		0-8	0.3	0-8	0.2
July 1979		0-8	0.1	0-8	0.1
Administrative Leave					
Overall (Hours)		0-8	0.	0-8	0.
October 1979		0-8	0.	0-8	0.
September 1979		0-8	0.	0-8	0.
August 1979		0-8	0.	0-8	0.
July 1979		0-8	0.	0-8	0.1
AWOL					
Overall (Hours)		0-8	0.	0-8	0.
October 1979		0-8	0.	0-8	0.
September 1979		0-8	0.	0-1	0.
August 1979		0-8	0.	0-8	0.
July 1979		0-8	0.	0-8	0.
LWOP					
Overall (Hours)		0-8	0.	0-8	0.
October 1979		0-0	0.	0-8	0.
September 1979		0-0	0.	0-8	0.1
August 1979		0-8	0.	0-8	0.
July 1979		0-0	0.	0-8	0.
Holiday Time					
Overall (Hours)		0-8	0.2	0-8	0.2
October 1979		0-8	0.8	0-8	0.4
September 1979		0-8	0.1	0-8	0.1
August 1979		0-8	0.1	0-8	0.1
July 1979		0-8	0.1	0-8	0.1

Table 12 (continued)

	<u>MALE</u>		<u>FEMALE</u>	
	<u>Range</u>	<u>Mean</u>	<u>Range</u>	<u>Mean</u>
Training Holiday				
Overall (Hours)	0-8	0.	0-8	0.
October 1979	0-0	0.	0-8	0.
September 1979	0-8	0.	0-0	0.
August 1979	0-0	0.	0-8	0.
July 1979	0-8	0.	0-8	0.
Air Evac/Amb Runs				
Overall (Hours)	0-8	0.1	0-8	0.
October 1979	0-8	0.	0-7	0.
September 1979	0-5	0.	0-6	0.
August 1979	0-7	0.	0-5	0.
July 1979	0-8	0.1	0-8	0.
Staff & Adm Meeting				
Overall (Hours)	0-8	0.1	0-8	0.1
October 1979	0-8	0.1	0-6	0.1
September 1979	0-5	0.1	0-7	0.1
August 1979	0-8	0.1	0-8	0.1
July 1979	0-8	0.1	0-8	0.1
Educ Advancement				
Overall (Hours)	0-8	0.	0-8	0.
October 1979	0-8	0.	0-8	0.
September 1979	0-8	0.	0-4	0.
August 1979	0-8	0.	0-8	0.
July 1979	0-8	0.	0-8	0.
Dependant child				
Overall (Hours)	0-2	0.	0-8	0.
October 1979	0-0	0.	0-3	0.
September 1979	0-1	0.	0-8	0.
August 1979	0-2	0.	0-1	0.
July 1979	0-1	0.	0-8	0.
Dependant Illness				
Overall (Hours)	0-8	0.	0-8	0.
October 1979	0-2	0.	0-8	0.
September 1979	0-4	0.	0-8	0.
August 1979	0-3	0.	0-8	0.
July 1979	0-8	0.	0-8	0.
Miscellaneous				
Overall (Hours)	0-8	0.2	0-8	0.1
October 1979	0-8	0.2	0-8	0.1
September 1979	0-8	0.2	0-8	0.1
August 1979	0-8	0.2	0-8	0.1
July 1979	0-8	0.2	0-8	0.1

Table 12 (continued)

	<u>MALE</u>		<u>FEMALE</u>	
	<u>Range</u>	<u>Mean</u>	<u>Range</u>	<u>Mean</u>
Orientation				
Overall (Hours)	0-8	0.1	0-8	0.1
October 1979	0-8	0.1	0-8	0.1
September 1979	0-8	0.1	0-8	0.1
August 1979	0-8	0.1	0-8	0.1
July 1979	0-8	0.1	0-8	0.1
Inprocessing				
Overall (Hours)	0-8	0.	0-8	0.
October 1979	0-8	0.	0-8	0.
September 1979	0-8	0.	0-8	0.
August 1979	0-8	0.1	0-8	0.1
July 1979	0-8	0.	0-8	0.
Outprocessing				
Overall (Hours)	0-8	0.2	0-8	0.1
October 1979	0-8	0.1	0-8	0.1
September 1979	0-8	0.1	0-8	0.1
August 1979	0-8	0.1	0-8	0.1
July 1979	0-8	0.2	0-8	0.1
Emergency Leave				
Overall (Hours)	0-8	0.1	0-8	0.
October 1979	0-8	0.1	0-8	0.
September 1979	0-8	0.	0-8	0.
August 1979	0-8	0.1	0-8	0.
July 1979	0-8	0.	0-8	0.
Terminal Leave				
Overall (Hours)	0-8	0.	0-8	0.
October 1979	0-8	0.	0-8	0.
September 1979	0-8	0.	0-8	0.
August 1979	0-8	0.	0-8	0.
July 1979	0-8	0.	0-8	0.1
Regular Leave				
Overall (Hours)	0-8	1.3	0-8	1.5
October 1979	0-8	0.9	0-8	1.3
September 1979	0-8	1.1	0-8	1.1
August 1979	0-8	1.3	0-8	1.8
July 1979	0-8	1.6	0-8	1.8

Table 12 (continued)

TABLE 13

**PREGNANCY RELATED LOST TIME
(By Facility Size)**

PREGNANCY RELATED LOST TIME

CATEGORY

	<u>MEDCEN</u>			<u>LARGE MEDDAC</u>			<u>SMALL MEDDAC</u>		
	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>
Doctor Appointment									
Overall (Hours)	0-2	0	0	0-8	0	0	0-4	0	0
October 1979	0-2	0	0	0-0	0	0	0-0	0	0
September 1979	0-2	0	0	0-1	0	0	0-4	0	0
August 1979	0-1	0	0	0-8	0	0	0-3	0	0
July 1979	0-2	0	0	0-1	0	0	0-2	0	0
Hospitalization									
Overall (Hours)	0-8	0	0	0-8	0	0	0-8	0	0
October 1979	0-8	0	0	0-0	0	0	0-0	0	0
September 1979	0-0	0	0	0-8	0	0	0-4	0	0
August 1979	0-8	0	0	0-8	0	0	0-8	0	0
July 1979	0-1	0	0	0-8	0	0	0-0	0	0
Leave									
Overall (Hours)	0-8	0	0	0-8	0	0	0-8	0	0
October 1979	0-8	0	0	0-0	0	0	0-8	0	0
September 1979	0-8	0	0	0-0	0	0	0-8	0	0
August 1979	0-0	0	0	0-8	0	0	0-0	0	0
July 1979	0-8	0	0	0-0	0	0	0-8	0	0
Incapacitating Time									
Overall (Hours)	0-8	0	0	0-8	0	0	0-8	0	0
October 1979	0-8	0	0	0-8	0	0	0-0	0	0
September 1979	0-8	0	0	0-8	0	0	0-8	0	0
August 1979	0-8	0	0	0-8	0	0	0-0	0	0
July 1979	0-8	0	0	0-4	0	0	0-0	0	0
Preg Related Other Than Med									
Overall (Hours)	0-0	0	0	0-3	0	0	0-4	0	0
October 1979	0-0	0	0	0-0	0	0	0-0	0	0
September 1979	0-0	0	0	0-0	0	0	0-4	0	0
August 1979	0-0	0	0	0-3	0	0	0-0	0	0
July 1979	0-0	0	0	0-0	0	0	0-0	0	0

	<u>MEDCEN</u>			<u>LARGE MEDDAC</u>			<u>SMALL MEDDAC</u>		
	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>	<u>Range</u>	<u>Mean</u>	<u>Median</u>
Maternity Leave									
Overall (Hours)	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
October 1979	0-8	0.1	0	0-8	0	0	0-8	0.1	0
September 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
August 1979	0-8	0.1	0	0-8	0.1	0	0-8	0.1	0
July 1979	0-8	0.1	0	0-8	0.1	0	0-8	0	0
Other									
Overall (Hours)	0-8	0	0	0-3	0	0	0-8	0	0
October 1979	0-0	0	0	0-0	0	0	0-0	0	0
September 1979	0-8	0	0	0-0	0	0	0-4	0	0
August 1979	0-0	0	0	0-3	0	0	0-2	0	0
July 1979	0-8	0	0	0-0	0	0	0-8	0	0

Table 13 (continued)

TABLE 14

**PREGNANCY RELATED LOST TIME
(By Sex)**

PREGNANCY RELATED LOST TIME

	SEX			
	<u>MALE*</u>		<u>FEMALE</u>	
	<u>Range</u>	<u>Mean</u>	<u>Range</u>	<u>Mean</u>
Doctor Appointment				
Overall (Hours)	0-4	0	0-8	0
October 1979	0-0	0	0-2	0
September 1979	0-4	0	0-2	0
August 1979	0-0	0	0-8	0
July 1979	0-1	0	0-2	0
Hospitalization				
Overall (Hours)	0-4	0	0-8	0
October 1979	0-0	0	0-8	0
September 1979	0-4	0	0-8	0
August 1979	0-0	0	0-8	0
July 1979	0-1	0	0-8	0
Leave				
Overall (Hours)	0-8	0	0-8	0
October 1979	0-8	0	0-8	0
September 1979	0-4	0	0-8	0
August 1979	0-0	0	0-8	0
July 1979	0-8	0	0-8	0
Incapacitating Time				
Overall (Hours)	0-4	0	0-8	0
October 1979	0-0	0	0-8	0
September 1979	0-4	0	0-8	0
August 1979	0-0	0	0-8	0
July 1979	0-0	0	0-8	0
Preg Related Other Than Med				
Overall (Hours)	0-4	0	0-3	0
October 1979	0-0	0	0-0	0
September 1979	0-4	0	0-0	0
August 1979	0-0	0	0-3	0
July 1979	0-0	0	0-0	0

* Male lost time due to pregnant spouse illness, attending childbirth classes, etc.

Table 14

	<u>MALE</u>		<u>FEMALE</u>	
	<u>Range</u>	<u>Mean</u>	<u>Range</u>	<u>Mean</u>
Maternity Leave				
Overall (Hours)	0-8	0	0-8	0.1
October 1979	0-0	0	0-8	0.1
September 1979	0-4	0	0-8	0.1
August 1979	0-0	0	0-8	0.1
July 1979	0-8	0	0-8	0.1
Other				
Overall (Hours)	0-4	0	0-8	0
October 1979	0-0	0	0-0	0
September 1979	0-4	0	0-8	0
August 1979	0-0	0	0-3	0
July 1979	0-0	0	0-8	0

Table 14 (continued)

TABLE 15

**REGULAR SCHEDULED DAY OFF
and SEX ASSIGNED
(By Facility Size)**

REGULAR SCHEDULED DAY OFF

	CATEGORY		
	<u>MEDCEN</u>	<u>LARGE MEDDAC</u>	<u>SMALL MEDDAC</u>
Overall (Personnel)	2,639	2,305	810
October 1979	585	516	194
September 1979	801	614	232
August 1979	631	593	192
July 1979	622	582	192
		ASSIGNED	
Male	8,938	7,600	3,239
Female	12,602	9,269	3,381

TABLE 16

**REGULAR SCHEDULED DAY OFF
(By Sex)**

REGULAR SCHEDULED DAY OFF

SEX

	<u>MALE</u>	<u>FEMALE</u>
<u>MEDCEN</u>		
Overall (Personnel)	971	1654
October 1979	224	358
September 1979	275	519
August 1979	232	398
July 1979	240	379
<u>LARGE MEDDAC</u>		
Overall (Personnel)	923	1375
October 1979	216	299
September 1979	243	371
August 1979	242	350
July 1979	222	355
<u>SMALL MEDDAC</u>		
Overall (Personnel)	362	442
October 1979	82	111
September 1979	107	125
August 1979	90	101
July 1979	83	105

Table 16

TABLE 17

STANDARD AIR FORCE WORKWEEK AND MAN-HOUR AVAILABILITY

STANDARD AIR FORCE WORKWEEK AND MAN-HOUR AVAILABILITY

Computation of Assigned & Available Hours	Workweek	
	5 Days 8 Hours/Day 40 Hour Week	
Calendar Days	30.44	
Less:		
Holiday	.75	
Relief Days*	8.70	
Assigned Days	20.99	
Hours Per Day	x 8	
Monthly Assigned Hours	168	
	MIL	CIV
Less:		
Leave (in unit)	6.89	14.79
PCS Related	1.73	
Medical (Sick Leave)	3.80	6.85
Organization Duties	4.36	
Education & Training	3.45	1.36
Social Actions	2.99	
Miscellaneous	.36	
Special Absences**		1.04
Total Non- available Hours	24	24
Monthly Hours Available to Primary Duty	144	144

* A relief day is a Saturday, Sunday, or compensation for weekend workday.

** Special absences for civilians include registration/ voting, blood donations, military funerals, grievance inquiries, court leave, labor/management relations, etc.

Table 17

TABLE 18

AIR FORCE TIME CLASSIFICATIONS

AIR FORCE TIME CLASSIFICATIONS

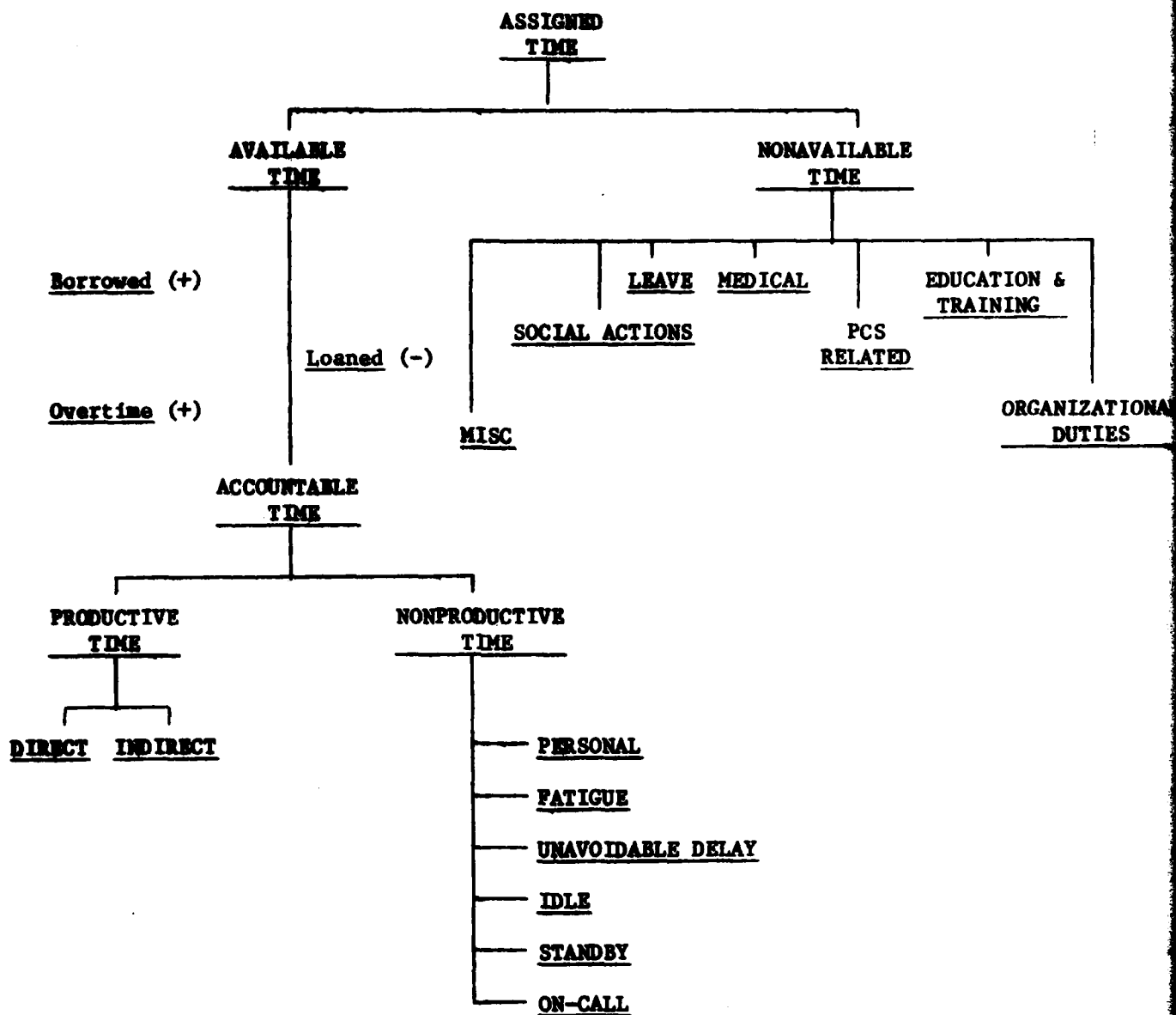


Table 18

APPENDIX A

**HSC COMMAND LETTER TO FIELD ANNOUNCING
NONPRODUCTIVE FACTOR ALLOWANCE STUDY**



DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY HEALTH SERVICES COMMAND
FORT SAN HOUSTON, TEXAS 78234

HSPA-N


8 DEC 197

SUBJECT: Nonproductive Factor Allowance

SEE DISTRIBUTION

1. The Health Care Studies Division of the Academy of Health Sciences, US Army, (AHS), is conducting a study of the Nonproductive Factor Allowance applicable to nursing care staffing at specified Medical Centers/Medical Department Activities. The purpose of the study is to validate the present 1.11 factor as a nonproductive time allowance.
2. If this study shows that the present factor is not valid for nursing care staffing, the results may assist in a new factor being developed for Staffing Guide calculations for manpower authorizations. Information concerning time lost from duty by your personnel will be required for this evaluation.
3. A survey questionnaire will be mailed under separate cover by AHS for completion by selected personnel within your unit. It is a matter of particular interest to this command that you give this study enthusiastic support.

FOR THE COMMANDER:


H. L. COOPER
LTC, AGC
Asst AG

DISTRIBUTION:

CDR HSC INSTALLATIONS
less: CDR USAG FT DETRICK
CDR HSC ACTIVITIES
less: SUPT AHS
CDR USAEHA
CDR USA MEDDAC, CANAL ZONE
CDR USA MEDDAC, FT SHERIDAN
CDR USARDA
CDR USA HEALTH CARE SYS SPT ACTV
CDR USA PNT ADMIN SYS & BIOSTATISTICS ACTV

APPENDIX A

APPENDIX B

REPORT OF NONPRODUCTIVE TIME QUESTIONNAIRE

REPORT OF NONPRODUCTIVE TIME QUESTIONNAIRE

PART I -- GENERAL INFORMATION

Respond by placing the appropriate answer in the space provided; specify on the blank lines for items 2 thru 4.

FOR STUDY AGENCY USE		
3-7	_____	1. Subject code (Respondents DO NOT place any data here)
8-11	_____	2. Date (Specify) _____
12,13	_____	3. Pay grade of individual (e.g., GS-7; E-7; O-4) (Specify) _____
14,15	_____	4. What is the Duty Military Occupational Specialty (DMOS)/Specialty Skill Identifier (SSI)(for military personnel) or Job Series (for civilian personnel)(e.g., 91C; 66H; GS-610) (Specify) _____
16	_____	5. Sex of individual (1=Male; 2=Female)
17	_____	6. Category of individual (1=Military officer; 2=Military enlisted; 3=Civilian RN; 4=Civilian OTHER THAN RN)

PART II -- NON-PREGNANCY RELATED NONPRODUCTIVE TIME

Respond by placing the appropriate answer in the space provided at the left of each item.

		7. For each item below, enter <u>total hours</u> during which individual was absent from <u>normal ward/clinic place of duty NOT</u> due to pregnancy (NOTE: consider normal duty hours for your ward/clinic):
18	_____	a. Doctor or Dental Appointment (Outpatient Care)
19	_____	b. Hospitalization/Quarters (Sick Leave)
20	_____	c. Convalescent Leave (Military Only)
21	_____	d. Mandatory Training (DOES NOT include ward/clinic or hospital in-service; DOES include Race Relations/Equal Opportunity Classes, Etc.)
22	_____	e. Seminars and Continuing Education Requirements (Seminars, short courses, Etc., ward/clinic in-service)
23	_____	f. Duty Roster Performance (Equivalent time-off after duty as CQ, CQ Runner, KP, Guard Duty, SDNCO, sdo (Military Only)
24	_____	g. Company Duty (Inspections, Parades, Etc.)
25	_____	h. Compensatory Time
26	_____	i. Temporary Duty (TDY)(When on official TDY Orders for duty other than where normally scheduled)
27	_____	j. Administrative Leave
28	_____	k. Absence Without Leave
29	_____	l. Leave Without Pay
30	_____	m. Holiday Time
31	_____	n. Training Holiday

THE REVERSE OF THIS FORM IS ALSO TO BE COMPLETED, if applicable.

APPENDIX B

- 32 _____ o. Air Evacuation/Ambulance Runs
 33 _____ p. Staff and Other Administrative Meetings
 34 _____ q. Educational Advancement Permitted During Duty Time
 35 _____ r. Absence due to lack of baby-sitter, or someone to care for dependent child/children
 36 _____ s. Absence due to illness of dependent/taking dependent to medical appointment
 37 _____ t. Miscellaneous (For those activities not covered by any other title, e.g., Court Duty, EEO Counselor Activities, Award Ceremonies not involving Parades, Etc.) (Specify) _____
 38 _____ u. Orientation
 39 _____ v. Inprocessing
 40 _____ w. Outprocessing
 41 _____ x. Emergency Leave
 42 _____ y. Terminal Leave (Military Only)
 43 _____ z. Regular Leave (for Military)/Annual Leave (for Civilian) (DOES NOT Include regular scheduled day(s) off during week)
 44 _____ 8. Was lost time due to regular scheduled day off during week; DOES NOT Include Pre-planned leaves noted above in Item 7 such as Maternity Leave or Vacation Leave; DOES Include ONLY regular scheduled day off during week)(1=Yes; 2=No)

PART III -- PREGNANCY RELATED NONPRODUCTIVE TIME

Respond by placing the appropriate answer in the space provided at the left of each item.

- 45 _____ 9. Has individual's duty position been changed due to pregnancy? (ANSWERED FOR FEMALE PERSONNEL ONLY)(1=Yes; 2=No; 3=Not pregnant; 4=N/A(Male))
 46 _____ 10. Was individual excused from duties due to pregnancy? (ANSWERED FOR FEMALE PERSONNEL ONLY)(1=Yes; 2=No; 3=Not pregnant; 4=N/A(Male))
 47 _____ 11. Was individual assigned to "lighter" duties due to pregnancy? (ANSWERED FOR FEMALE PERSONNEL ONLY)(1=Yes; 2=No; 3=Not pregnant; 4=N/A(Male))
 12. For each item below, enter total hours during which individual was absent from normal ward/clinic place of duty due to pregnancy (NOTE: consider normal duty hours for your ward/clinic):
 48 _____ a. Doctor Appointment (Outpatient Care)
 49 _____ b. Hospitalization
 50 _____ c. Leave
 51 _____ d. Incapacitating Time Excused for Pregnancy Related Reasons, e.g., Morning Sickness (Quarters)
 52 _____ e. Absence for Other Than Medical Reasons (Classes on Parent Training, Child Care, Natural Childbirth, Etc.)
 53 _____ f. Maternity Leave (Military Only); Leave Without Pay, Maternity Leave (Civilians)
 54 _____ g. Other (Specify) _____
 80 1 13. Card number (Respondents DO NOT place any data here)

THE REVERSE OF THIS FORM IS ALSO TO BE COMPLETED.

APPENDIX C

DEPARTMENT OF NURSING ACTIVITIES STRENGTH REPORT

DEPARTMENT OF NURSING ACTIVITIES STRENGTH REPORT

Respond by indicating the total number of personnel actually assigned in each of the following categories. Any classification present and not specifically listed will be added under the appropriate enlisted, officer, civilian RN, or civilian other than RN heading(s). ALL PERSONNEL ASSIGNED TO THE DEPARTMENT OF NURSING ARE TO BE ACCOUNTED FOR. ONLY TOTAL PERSONNEL ASSIGNED IN THE CATEGORIES WILL BE SHOWN.

	91B= Medical Specialist	
	91C= Clinical Specialist	
	91D= Operating Room Specialist	
	91F= Psychiatric Specialist	
	91V= Respiratory Specialist	
	71L= Administrative Specialist	
	Other Enlisted (Specify) _____	
3-5 _____	TOTAL ENLISTED PERSONNEL (Male)	
6-8 _____	TOTAL ENLISTED PERSONNEL (Female)	

	66A= Nurse Administrator	
	66C= Psychiatric/Mental Health Nurse	
	66D= Pediatric Nurse	
	66E= Operating Room Nurse	
	66F= Nurse Anesthetist	
	66G= Obstetric/Gynecology Nurse	
	66H= Medical-Surgical Nurse	
	66J= Clinical Nurse	
	Other Officer (Specify) _____	
9-11 _____	TOTAL OFFICER PERSONNEL (Male)	
12-14 _____	TOTAL OFFICER PERSONNEL (Female)	

	GS-605= Nurse Anesthetist	
	GS-610= Nurse	
	Operating Room Nurse	
	Psychiatric Nurse	
	Clinical Nurse	
	Occupational Health Nurse	
	Other Civilian RN (Specify) _____	
15-17 _____	TOTAL CIVILIAN RN (Male)	
18-20 _____	TOTAL CIVILIAN RN (Female)	

THE REVERSE OF THIS FORM IS ALSO TO BE COMPLETED.

APPENDIX C

DEPARTMENT OF NURSING ACTIVITIES STRENGTH REPORT CONTINUED

	GS-301= General Clerical & Administrative Clerk
	GS-312= Clerk-Stenographer
	GS-318= Secretary
	GS-621= Nursing Assistant
	Nursing Assistant (Medical-Surgical)
	Nursing Assistant (Psychiatry)
	Nursing Assistant (Operating Room)
	First-Aid Attendant
	GS-622= Medical Aid (Sterile Supplies)
	GS-623= First-Aid Attendant
	GS-649= Medical Machine Operator
	Inhalation Therapy Technician
	Pulmonary Function Technician
	Hemodialysis Technician
	GS-1702= Educational Technician
	WG-7504= Ward Attendant
	Other Civilian Other Than RN (Specify) _____
21-23	_____ TOTAL CIVILIAN OTHER THAN RN (Male)
24-26	_____ TOTAL CIVILIAN OTHER THAN RN (Female)

80 2 Card Number (Respondents DO NOT place any data here)

THE REVERSE OF THIS FORM IS ALSO TO BE COMPLETED.

APPENDIX D

AHS LETTER OF INSTRUCTION FOR
DATA COLLECTION 15 FEBRUARY 1979



DEPARTMENT OF THE ARMY
ACADEMY OF HEALTH SCIENCES, UNITED STATES ARMY
FORT SAM HOUSTON, TEXAS 78234

HSA-CHC

12 FEB 1979

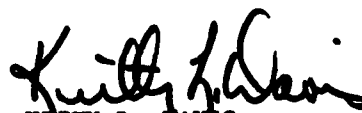
SUBJECT: Nonproductive Factor Allowance

Commander
US Army Medical Department Activity
Fort Hood, TX 76544

1. Reference letter, HSPA-N, US Army Health Services Command, subject: Nonproductive Factor Allowance, dated 6 December 1978.
2. The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed by the US Army Health Services Command to conduct a study of specified medical activities concerning the validity of the nonproductive factor allowed by the staffing guide.
3. To properly conduct this study, a pilot test of the data collection instruments has been planned. In consultation with the Chief Nurse, US Army Health Services Command, it is proposed to conduct the pilot test using your MEDDAC's Department of Nursing. Two survey questionnaires with instructions for completion are attached.
4. It is requested that questionnaires be completed for all personnel with lost time assigned to the Department of Nursing on 15 February 1979. The Department of Nursing Strength Report is also to be completed showing assigned strength on 15 February 1979. The questionnaires are to be mailed to the Academy immediately after the day of data collection. All shifts of the Department of Nursing commencing on 15 February 1979 are to be considered.
5. It is suggested that you appoint a project officer from the Department of Nursing to distribute and collect the questionnaires, prepare the strength questionnaire, and maintain contact with the AHS POC. It is requested that the AHS POC be notified as to the name, position, and AUTOVON number of the project officer.
6. POC is Mr. David F. Alexander, AUTOVON 471-4541/3116/3331.

FOR THE SUPERINTENDENT:

2 Incl
as


KEITH L. DAVIS
CPT, MSC
C, Admin Svcs Div

APPENDIX D



REPORT OF NONPRODUCTIVE TIME QUESTIONNAIRE INSTRUCTIONS

1. INTRODUCTION: The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed by the Commander, US Army Health Services Command (HSC) to conduct a study of the Nonproductive Time Factor Allowance used in staffing guide yardsticks. Questionnaires are to be completed on 15 February 1979 and returned to the Academy immediately after data collection.
2. PURPOSE: The purpose of these survey questionnaires is to document the amount of duty time lost by personnel of the Department of Nursing, military and civilian, in activities not related to direct patient care.
3. PROCEDURES:
 - a. Copies of this questionnaire will be provided to the project officer for completion showing all lost time by personnel of the Department of Nursing.
 - b. All personnel assigned to the Department of Nursing are to be considered.
 - c. It is requested that the questionnaire be completed for all personnel with lost time, regardless of amount, to include personnel for whom the collection day was their scheduled day off. Lost time is to be reported in whole hours. All shifts of the Department of Nursing commencing on 15 February 1979 are to be considered for the day of data collection. The questionnaires are to be mailed to the Academy immediately after the day of data collection.
 - d. When each questionnaire is completed, please mail to:

Superintendent
Academy of Health Sciences, US Army
ATTN: C, Health Care Studies Division
Fort Sam Houston, Texas 78234
4. COORDINATION: Any question requiring clarification or further explanation may be directed to Mr David F Alexander, AUTOVON 471-4541/3116/3331.

APPENDIX E

**AHS LETTER OF INSTRUCTION FOR
DATA COLLECTION 20 JULY 1979**



DEPARTMENT OF THE ARMY
ACADEMY OF HEALTH SCIENCES, UNITED STATES ARMY
FORT SAN HOUSTON, TEXAS 78234

14 JUN 1979

HSA-CHC

SUBJECT: Nonproductive Factor Allowance

SEE DISTRIBUTION

1. Reference letter HSPA-N, US Army Health Services Command (HSC), subject as above, dated 6 December 1978.
2. The Health Care Studies Division (HCSD), Academy of Health Sciences, US Army (AHS), has been directed by the US Army Health Services Command to conduct a study of specified medical activities concerning the validity of the nonproductive factor allowed by the staffing guide.
3. Four separate data collection dates will be used in Phase I of the study; 20 July 1979 is the first of the four dates. Other letters will follow with the future dates.
4. Two survey questionnaires with instructions for completion are inclosed. It is requested that questionnaires be completed for all personnel with lost time assigned to the Department of Nursing on 20 July 1979. The Department of Nursing Strength Report is also to be completed showing assigned strength on 20 July 1979. The questionnaires are to be mailed to the Academy of Health Sciences, ATTN: HSA-CHC, immediately after the date of data collection.
5. It is suggested that you appoint a project officer from the Department of Nursing to distribute and collect the questionnaires, prepare the strength questionnaire, and maintain contact with the AHS POC. It is requested that the AHS POC be notified as to the name, position, and AUTOVON number of the project officer.
6. POC is Mr. David F. Alexander, AUTOVON 471-4541/3116/3331.

FOR THE SUPERINTENDENT:

2 Incl
as

CF: HSA-2A

Keith L. Davis
KEITH L. DAVIS
CPT, MSC
C, Admin Svc Div

APPENDIX E



DEPARTMENT OF NURSING STRENGTH REPORT INSTRUCTIONS

1. INTRODUCTION: The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed by the Commander, US Army Health Services Command (HSC) to conduct a study of the Nonproductive Time Factor Allowance used in staffing guide yardsticks.

2. PURPOSE: The purpose of this report is to give the Health Care Studies Division project officer base data from which to compute time authorized and assigned personnel of the Department of Nursing.

3. PROCEDURES:

a. The attached report form is to be provided to your project officer for completion of Department of Nursing assigned strength on 20 July 1979. ONLY the personnel assigned to the Department of Nursing will be considered for this report. It is important that all personnel assigned to the Department of Nursing be accounted for.

b. It is requested that the report be completed and mailed back to this office immediately after completion on 20 July 1979. When the report is completed, please mail to:

Superintendent
Academy of Health Sciences, US Army
ATTN: C, Health Care Studies Division
Fort Sam Houston, Texas 78234

4. COORDINATION: Any questions requiring clarification or further explanation may be directed to Mr David F Alexander, AUTOVON 471-4541/3116/3331.

REPORT OF NONPRODUCTIVE TIME QUESTIONNAIRE INSTRUCTIONS

1. INTRODUCTION: The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed by the Commander, US Army Health Services Command (HSC) to conduct a study of the Nonproductive Time Factor Allowance used in staffing guide yardsticks. Questionnaires are to be completed on 20 July 1979 and returned to the Academy of Health Sciences immediately after data collection.

2. PURPOSE: The purpose of these survey questionnaires is to document the amount of duty time lost by personnel of the Department of Nursing, military and civilian, in activities not related to direct patient care.

3. PROCEDURES:

a. Copies of this questionnaire will be provided to the project officer for completion showing all lost time by personnel of the Department of Nursing. ONLY personnel ASSIGNED to the Department of Nursing are to be considered and reported.

b. All personnel assigned to the Department of Nursing are to be considered.

c. It is requested that the questionnaire be completed for all personnel of the Department of Nursing with lost time, regardless of amount, to include personnel for whom the collection day was their scheduled day off. Lost time is to be reported in whole hours. All shifts of the Department of Nursing commencing on 20 July 1979 are to be considered for the day of data collection. The questionnaires are to be mailed to the Academy of Health Sciences immediately after the day of data collection.

d. When each questionnaire is completed, please mail to:

Superintendent
Academy of Health Sciences, US Army
ATTN: C, Health Care Studies Division
Fort Sam Houston, Texas 78234

4. COORDINATION: Any question requiring clarification or further explanation may be directed to Mr David F Alexander, AUTOVON 471-4541/3116/3331.

APPENDIX F

**AHS LETTER OF INSTRUCTION FOR
DATA COLLECTION 29 AUGUST 1979**



DEPARTMENT OF THE ARMY
ACADEMY OF HEALTH SCIENCES, UNITED STATES ARMY
FORT SAM HOUSTON, TEXAS 78234

HSA-CHC

23 July 1979

SUBJECT: Nonproductive Factor Allowance

SEE DISTRIBUTION

1. References.

a. Letter, HSPA-N, US Army Health Services Command, SAB, dated 6 December 1978.

b. Letter, HSA-CHC, Academy of Health Sciences, US Army, SAB, dated 14 June 1979.

2. The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed to conduct a study concerning the validity of the nonproductive factor allowed by the staffing guide.

3. The letter, reference 1b above, indicated that four separate data collection dates would be used for Phase I; the first one was 20 July 1979. This letter is to give instructions for the second data collection date.

4. Two survey questionnaires with instructions for completion are inclosed. It is requested that questionnaires be completed for all personnel with lost time assigned to the Department of Nursing on 29 August 1979. The Department of Nursing Strength Report is also to be completed showing assigned strength on 29 August 1979. These data collection instruments are to be mailed to the Academy of Health Sciences, ATTN: HSA-CHC, immediately after the date of data collection.

5. POC at this Headquarters is Mr. David F. Alexander, AUTOVON 471-4541/3116/3331.

FOR THE SUPERINTENDENT:

2 Incl
as

Keith L. Davis
KEITH L. DAVIS
CPT, MSC
Chief, Admin Svcs Div

APPENDIX F



DEPARTMENT OF NURSING STRENGTH REPORT INSTRUCTIONS

1. INTRODUCTION: The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed by the Commander, US Army Health Services Command (HSC) to conduct a study of the Nonproductive Time Factor Allowance used in staffing guide yardsticks.

2. PURPOSE: The purpose of this report is to give the Health Care Studies Division project officer base data from which to compute time authorized and assigned personnel of the Department of Nursing.

3. PROCEDURES:

a. The attached report form is to be provided to the Department of Nursing project officer for completion of Department of Nursing assigned strength on 29 August 1979. ONLY the personnel assigned to the Department of Nursing will be considered for this report. It is important that all personnel assigned to the Department of Nursing be accounted for.

b. It is requested that the report be completed and mailed back to this office immediately after completion on 29 August 1979. When the report is completed, please mail to:

Superintendent
Academy of Health Sciences, US Army
ATTN: HSA-CHC
Fort Sam Houston, Texas 78234

4. COORDINATION: Any questions requiring clarification or further explanation may be directed to Mr David F Alexander, AUTOVON 471-4541/3116/3331.

REPORT OF NONPRODUCTIVE TIME QUESTIONNAIRE INSTRUCTIONS

1. **INTRODUCTION:** The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed by the Commander, US Army Health Services Command (HSC) to conduct a study of the Nonproductive Time Factor Allowance used in staffing guide yardsticks. Questionnaires are to be completed on 29 August 1979 and returned to the Academy of Health Sciences immediately after data collection.
2. **PURPOSE:** The purpose of these survey questionnaires is to document the amount of duty time lost by personnel of the Department of Nursing, military and civilian, in activities not related to direct patient care.
3. **PROCEDURES:**
 - a. Copies of this questionnaire will be provided to the project officer for completion showing all lost time by personnel of the Department of Nursing. ONLY personnel ASSIGNED to the Department of Nursing are to be considered and reported.
 - b. All personnel assigned to the Department of Nursing are to be considered.
 - c. It is requested that the questionnaire be completed for all personnel of the Department of Nursing with lost time, regardless of amount, to include personnel for whom the collection day was their scheduled day off. Lost time is to be reported in whole hours. All shifts of the Department of Nursing commencing on 29 August 1979 are to be considered for the day of data collection. The questionnaires are to be mailed to the Academy of Health Sciences immediately after the day of data collection.
 - d. When each questionnaire is completed, please mail to:

Superintendent
Academy of Health Sciences, US Army
ATTN: HSA-CHC
Fort Sam Houston, Texas 78234
4. **COORDINATION:** Any question requiring clarification or further explanation may be directed to Mr David F Alexander, AUTOVON 471-4541/3116/3331.

APPENDIX G

**AHS LETTER OF INSTRUCTION FOR
DATA COLLECTION 24 SEPTEMBER 1979**



DEPARTMENT OF THE ARMY
ACADEMY OF HEALTH SCIENCES, UNITED STATES ARMY
FORT SAM HOUSTON, TEXAS 78234

28 AUG 1979

HSA-CHC

SUBJECT: Nonproductive Factor Allowance

SEE DISTRIBUTION

1. References.

a. Letter, HSPA-N, US Army Health Services Command, SAB, dated 6 December 1978.

b. Letter, HSA-CHC, Academy of Health Services, US Army, SAB, dated 14 July 1979.

2. The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed to conduct a study concerning the validity of the nonproductive factor allowed by the staffing guide.


3. The letter, reference 1b above, indicated that four separate data collection dates would be used for Phase I; the first one was 20 July 1979, and the second one was 29 August 1979. This letter is to give instructions for the third data collection date.

4. Two survey questionnaires with instructions for completion are inclosed. It is requested that questionnaires be completed for all personnel with lost time assigned to the Department of Nursing on 24 September 1979. The Department of Nursing Strength Report is also to be completed showing assigned strength on 24 September 1979. These data collection instruments are to be mailed to the Academy of Health Sciences, ATTN: HSA-CHC, immediately after the date of data collection.

5. POC at this Headquarters is Mr. David F. Alexander, AV 471-4541/3116/3331.

FOR THE SUPERINTENDENT:

2 Incl
as


KEITH L. DAVIS
CPT, MSC
Chief, Admin Services Div
APPENDIX G



DEPARTMENT OF NURSING STRENGTH REPORT INSTRUCTIONS

1. INTRODUCTION: The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed by the Commander, US Army Health Services Command (HSC) to conduct a study of the Nonproductive Time Factor Allowance used in staffing guide yardsticks.

2. PURPOSE: The purpose of this report is to give the Health Care Studies Division project officer base data from which to compute time authorized and assigned personnel of the Department of Nursing.

3. PROCEDURES:

a. The attached report form is to be provided to the Department of Nursing project officer for completion of Department of Nursing assigned strength on 24 September 1979. ONLY the personnel assigned to the Department of Nursing will be considered for this report. It is important that all personnel assigned to the Department of Nursing be accounted for.

b. It is requested that the report be completed and mailed back to this office immediately after completion on 24 September 1979. When the report is completed, please mail to:

Superintendent
Academy of Health Sciences, US Army
ATTN: HSA-CHC
Fort Sam Houston, Texas 78234

4. COORDINATION: Any questions requiring clarification or further explanation may be directed to Mr David F Alexander, AUTOVON 471-4541/3116/3331.

REPORT OF NONPRODUCTIVE TIME QUESTIONNAIRE INSTRUCTIONS

1. **INTRODUCTION:** The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed by the Commander, US Army Health Services Command (HSC) to conduct a study of the Nonproductive Time Factor Allowance used in staffing guide yardsticks. Questionnaires are to be completed on 24 September 1979 and returned to the Academy of Health Sciences immediately after data collection.
2. **PURPOSE:** The purpose of these survey questionnaires is to document the amount of duty time lost by personnel of the Department of Nursing, military and civilian, in activities not related to direct patient care.
3. **PROCEDURES:**
 - a. Copies of this questionnaire will be provided to the project officer for completion showing all lost time by personnel of the Department of Nursing. ONLY personnel ASSIGNED to the Department of Nursing are to be considered and reported.
 - b. All personnel assigned to the Department of Nursing are to be considered.
 - c. It is requested that the questionnaire be completed for all personnel of the Department of Nursing with lost time, regardless of amount, to include personnel for whom the collection day was their scheduled day off. Lost time is to be reported in whole hours. All shifts of the Department of Nursing commencing on 24 September 1979 are to be considered for the day of data collection. The questionnaires are to be mailed to the Academy of Health Sciences immediately after the day of data collection.
 - d. When each questionnaire is completed, please mail to:

Superintendent
Academy of Health Sciences, US Army
ATTN: HSA-CHC
Fort Sam Houston, Texas 78234
4. **COORDINATION:** Any question requiring clarification or further explanation may be directed to Mr Alexander, AUTOVON 471-4541/3116/3331.

APPENDIX H

AHS LETTER OF INSTRUCTION FOR
DATA COLLECTION 11 OCTOBER 1979



DEPARTMENT OF THE ARMY
ACADEMY OF HEALTH SCIENCES, UNITED STATES ARMY
FORT SAM HOUSTON, TEXAS 78234

20 SEP 1979

HSA-CHC

SUBJECT: Nonproductive Factor Allowance

SEE DISTRIBUTION

1. References;

a. Letter, HSPA-N, US Army Health Services Command, SAB,
6 December 1979.

b. Letter, HSA-CHC, Academy of Health Sciences, US Army, SAB,
14 July 1979.

2. The Health Care Studies Division, Academy of Health Sciences,
US Army, has been directed to conduct a study concerning the
validity of the nonproductive factor allowed by the staffing guide.

3. The letter, reference 1b above, indicated four separate data
collection dates would be used for Phase I: the first one was
20 July 1979, the second one was 29 August 1979, and the third one
was 24 September 1979. This letter is to give instructions for the
fourth data collection date.

4. Two survey questionnaires with instructions for completion are
included. It is requested that questionnaires be completed for all
personnel with lost time assigned to the Department of Nursing on
11 October 1979. The Department of Nursing Strength Report is also
to be completed showing assigned strength on 11 October 1979. These
data collection instruments are to be mailed to the Academy of Health
Sciences, ATTN: HSA-CHC, by first class mail immediately after the
date of data collection.

5. The POC at this Headquarters is Mr. David F. Alexander, Autovon
471-4541/3116/3331.

FOR THE SUPERINTENDENT:

2 Incl
as

Keith L. Davis
KEITH L. DAVIS
CPT, MSC
C, Admin Svcs Div

APPENDIX H



DEPARTMENT OF NURSING STRENGTH REPORT INSTRUCTIONS

1. INTRODUCTION: The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed by the Commander, US Army Health Services Command (HSC) to conduct a study of the Nonproductive Time Factor Allowance used in staffing guide yardsticks.

2. PURPOSE: The purpose of this report is to give the Health Care Studies Division project officer base data from which to compute time authorized and assigned personnel of the Department of Nursing.

3. PROCEDURES:

a. The attached report form is to be provided to the Department of Nursing project officer for completion of Department of Nursing assigned strength on 11 October 1979. ONLY the personnel assigned to the Department of Nursing will be considered for this report. It is important that all personnel assigned to the Department of Nursing be accounted for.

b. It is requested that the report be completed and mailed by First Class back to this office immediately after completion on 11 October 1979. When the report is completed, please mail to:

Superintendent
Academy of Health Sciences, US Army
ATTN: HSA-CHC
Fort Sam Houston, Texas 78234

4. COORDINATION: Any questions requiring clarification or further explanation may be directed to Mr David F Alexander, AV 471-4541/3116/3331.

REPORT OF NONPRODUCTIVE TIME QUESTIONNAIRE INSTRUCTIONS

1. **INTRODUCTION:** The Health Care Studies Division, Academy of Health Sciences, US Army, has been directed by the Commander, US Army Health Services Command (HSC) to conduct a study of the Nonproductive Time Factor Allowance used in staffing guide yardsticks. Questionnaires are to be completed on 11 October 1979 and returned by First Class mail to the Academy of Health Sciences immediately after data collection.
2. **PURPOSE:** The purpose of these survey questionnaires is to document the amount of duty time lost by personnel of the Department of Nursing, military and civilian, in activities not related to direct patient care.
3. **PROCEDURES:**
 - a. Copies of this questionnaire will be provided to the project officer for completion showing all lost time by personnel of the Department of Nursing. ONLY personnel ASSIGNED to the Department of Nursing are to be considered and reported.
 - b. All personnel assigned to the Department of Nursing are to be considered.
 - c. It is requested that the questionnaire be completed for all personnel of the Department of Nursing with lost time, regardless of amount, to include personnel for whom the collection day was their scheduled day off. Lost time is to be reported in whole hours. All shifts of the Department of Nursing commencing on 11 October 1979 are to be considered for the day of data collection. The questionnaires are to be mailed by First Class to the Academy of Health Sciences immediately after the day of data collection.
 - d. When each questionnaire is completed, please mail First Class to:

Superintendent
Academy of Health Sciences, US Army
ATTN: HSA-CHC
Fort Sam Houston, Texas 78234
4. **COORDINATION:** Any question requiring clarification or further explanation may be directed to Mr David F Alexander, AV 471-4541/3116/3331.

APPENDIX I

DEFINITIONS

DEFINITIONS

Allowance Factor - A coefficient, based on authorized allowances, e.g., PF&D, which when applied to productive time (leveled time, if appropriate) results in the productive allowed time.

Allowed Time - The leveled time plus allowances for fatigue and delays. If leveling is neither required nor feasible, the allowed time is the actual productive time plus necessary allowances for personal, fatigue and nonavoidable delays, as appropriate.

Assigned Time - The normal duty hours prescribed for an individual while assigned to a military unit. Total assigned hours are computed by multiplying daily normal duty hours by the net assigned duty days. Net assigned duty days exclude relief days (for example, weekends, and holidays). NOTE: Borrowed personnel are not classified as assigned for purposes of this computation.

Available Time - Assigned man-hours dedicated to performance of primary duties, plus time specifically allowed for personal, fatigue, delay, standby, and travel activity. This is computed by subtracting the nonavailable hours from the assigned hours.

Avoidable Delay - Any unnecessary delay, regardless of source, that causes work stoppage. Time lost to avoidable delay is not included in the standard.

Borrowed Time - Time on loan from another work center.

Delay Allowance - A time increment in a time standard used to compensate for unavoidable delay.

Direct Time - Productive time expenditure which can be identified with and assessed against a particular part, product, or group of parts or products accurately and without undue effort and expense.

Fatigue Allowance - The time included in a standard used to allow for decreases or losses in production which might be caused by fatigue. (Usually applied as a percentage of the leveled, normal, or adjusted time.)

General Military Training - That training (formerly called collateral training) distinct from technical and unit training in skills associated with an organization's primary mission. It is intended to develop and enhance the individual's skills, knowledge, and understanding of: why he fights, his basic arms; the enemy's nature, methods, and capabilities; how to protect himself and his unit actively and passively; how to care for his physical needs and how to maintain health; and how to maintain mental and physical alertness.

Idle Time - Any time expended by the worker either in an avoidable delay status, or in doing unnecessary work, when work is available. It does not include time for personal requirements, fatigue, and unavoidable delays. Idle time is not included in a manpower standard. An individual going to the post exchange, commissary, barber shop, etc., with the above conditions met, is classified as being on idle time status.

Indirect Time - Time that is expended rendering services necessary to production, but which cannot be specifically assessed against a particular product or group of products accurately or without undue effort and expense.

Leveled Time - Actual productive time adjusted to account for differences in pace of observed workers.

Loaned Time - Time loaned to other work centers. This time is not accountable to the work center providing the loaned time.

Man-Hour - A unit of measuring work. It is equivalent to one man working a normal pace for 60 minutes, two men working at normal pace for 30 minutes, or a similar combination of men working at normal pace for a period of time to equal 60 minutes.

Man-Hour Availability Factor (MAF) - This factor is the average number of man-hours per month that an assigned individual is available to perform primary duties. Required man-hours are divided by the MAF to determine the manpower requirements.

Mix - The combination of inservice (military and civilian) and contract services resources used for mission performance.

Nonavailable Time - Assigned man-hours allowed for participation in those activities directed, recognized, and approved by the Service which render the individual unavailable for assigned primary duties, e.g.:

1. **Leave** - Permission to be absent from work or duty in official status for a specified period of time to include passes and rest and recuperation.
2. **PCS Related** - The time workers are absent from duty for accomplishing tasks generated by a permanent change of duty station. This includes in/out processing and family settlement.
3. **Medical** - Official permission to be absent from primary duty for medical reasons such as pregnancy, inpatient and quarters cases, outpatient visits, physicals, and dental visits.
4. **Organizational Duties** - Official release from duty to perform such things as Commander's Call, aerobics, counseling, reviews, boards and councils, retreats and parades, details, charge of quarters, inspections, additional duties, and sponsor duties.

5. Education and Training - Official release from duty to attend on-base or TDY education and training courses such as GMT, AFSC Med Training, NCO Academy, Marksmanship, Effective Writing, AFIT, Survival, TDY, Technical Training, IDEA High School, CDC and Survey Taking. Also taking tests such as PFE, SKT, AF Sup Exam, CLEP are included. Excludes social action training.
6. Social Actions - Official permission to be absent from duty for reasons of drug and alcohol rehabilitation, formal human relation training, and formal drug/alcohol training.
7. Miscellaneous - Release from duty for civic duties, such as voting or jury duty. Also includes AWOL/desertion.

Nonproductive Time - Accountable time expended in either personal, fatigue, unavoidable delay, standby, on call, or idle (avoidable delay) status.

On-Call Time - A nonproductive category of time in which an off-duty worker can be contacted by telephone or other means at a prearranged location other than the work station. Only the productive time performed by the worker in the work center or at the work location, including necessary associated travel on the job, is to be credited to the category of productive work to which it relates.

Personal Allowance - Time included in a standard to permit a worker to attend to personal necessities, such as obtaining drinks of water or making trips to the restroom. (Usually applied as a percentage of the leveled, normal, or adjusted time.)

Productive Time - Time expended performing work that is useful and essential to the mission of the work center. See Direct Time and Indirect Time.

Standby Time - Time in which the worker is required to be present to do time-sensitive work, and when the worker is in a ready status to perform work, but is prevented from performing work because none is available. Time can be classified as standby only when it is essential to mission accomplishment and no work can be done or made available during that period. Examples of standby time might be: emergency room medical technicians awaiting patients.

Unavoidable Delay - An occurrence which is essential and outside the worker's control or responsibility that prevents the accomplishment of productive work.

Work Center Description (WCD) - Shows work center responsibilities structured by priority for easy measurement of work categories, tasks, and subtasks. It is prepared for each work center in a manpower standards study.

DISTRIBUTION LIST

Defense Documentation Center (12)

HQDA (DASG-DCA) (3)

**Dir, Joint Medical Library, Offices of the Surgeons General, USA/USAF,
The Pentagon, Rm 1B473, Washington, DC 20310 (1)**

HSPA-N, HSC (3)

HSOP-S (5)

AHS, Stimson Library (1)

DAI
FILM